

Vendor Seminar

30 October 2015

For HKEx Information Vendors and
Independent Software Vendors



1. Market Overview and Updates

By Winnie Poon
Head of Market Data
Global Markets Division

2. Business Initiatives

By Winnie Sin
Sales and Marketing, Market Data
Global Markets Division

3. Upcoming Client Activities

By Karen Lam
Vendor Support and Data Management, Market Data
Global Markets Division

4. Highlight on Compliance Issues

By Raymond Lo
Compliance, Market Data Global Markets Division

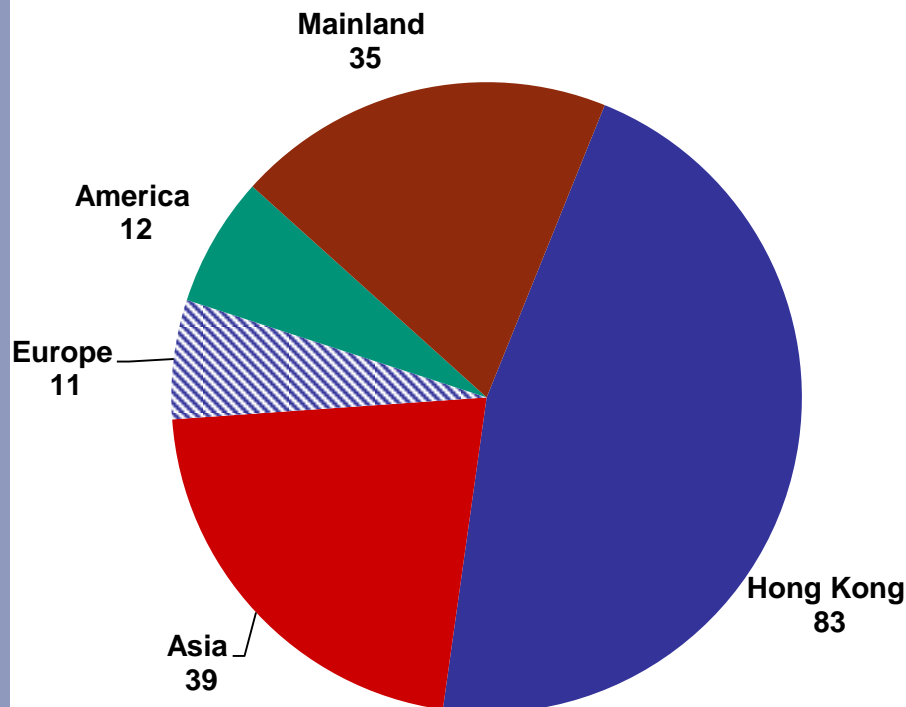
5. Q&A

2015 Updates

Market Overview - Client Classification

As of Sep 2015

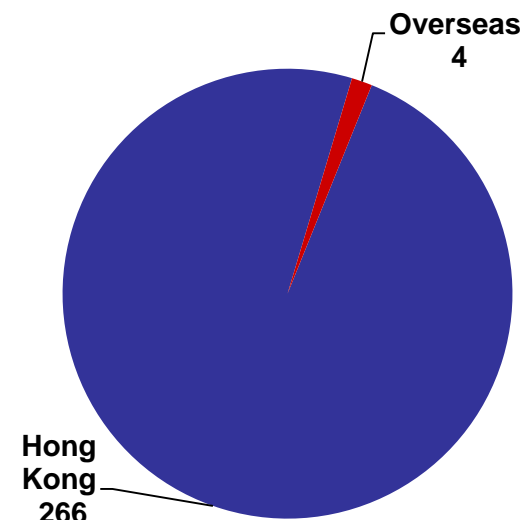
Real-time Information Vendors: 180



Information business	53
Exchange Participants and Affiliates	31
Banks, buy-sides & other financial institutions	52
Media	13

Telecommunications service providers	5
System vendors	11
Niche players	3
Mainland Brokers	12

End-Users

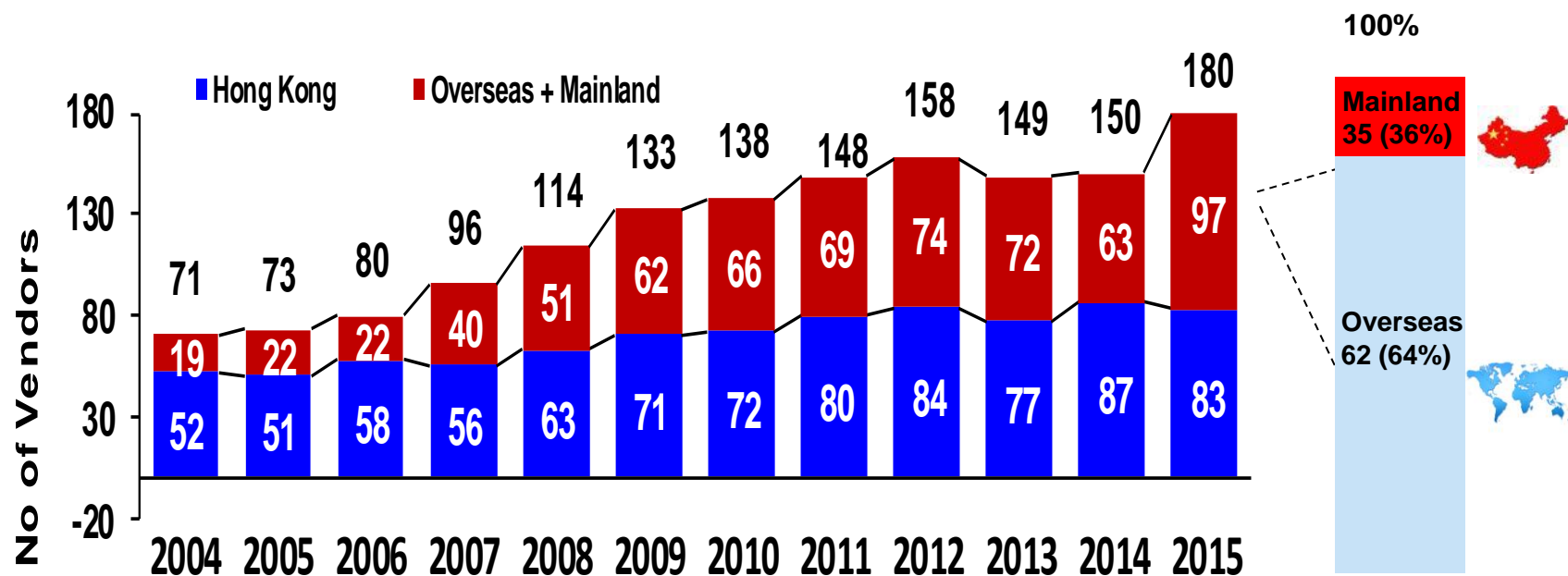


Exchange Participants	266
Non-Exchange Participants	4

2015 Updates

Market Overview – Real-time Data Vendors

As of Sep 2015



Total number of real-time data vendors is 180 by September 2015, 19% are from Mainland China.

2015 Updates

OMD-C & OMD-D Subscription Status of Direct Connection Clients



OMD-C: Total of 326 Direct Connection Clients:

	IVs	EUs	Total
(1) No. of clients	56	270	326
(2) No. of connections			
OMD SS	49	377	389
OMD SP	47	26	73
OMD SF	23	15	41

OMD-D: Total of 86 Direct Connection Clients:

	IVs	EUs	Total
(1) No. of clients	40	36	86
(2) No. of connections			
OMD DS	26	10	36
OMD DP	39	25	64
OMD DF	23	18	41

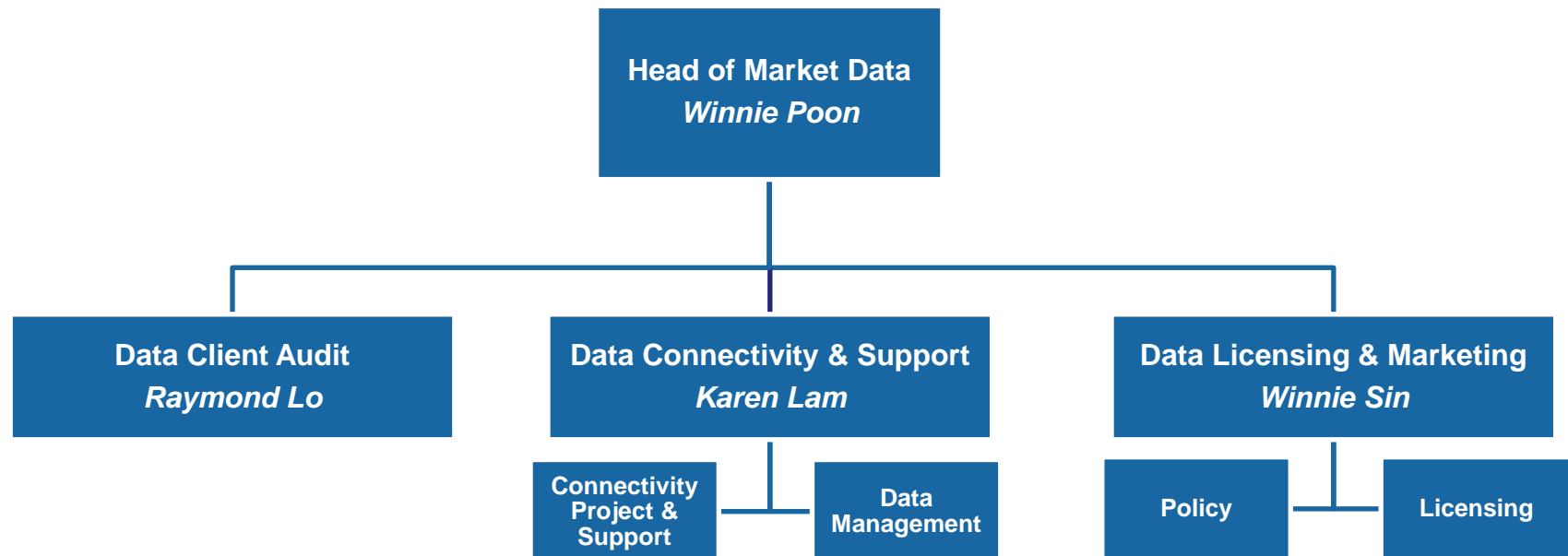
As of Sep 2015

The overall take up rate is satisfactory and we will continue to promote our datafeed products

Upcoming initiatives:

- Streamline licence application process
- Consider introducing historical data redistribution licence
- Further promotion on Mainland market data coverage
- Renew Market Data Collaboration Program with Shanghai and Shenzhen Stock Exchanges (AH Collaboration Program)
- Extend Mainland Discount Program

Effective 1 Nov 2015



Asia Pacific Financial Information Conference 2015

An annual market data conference organized by FISD – an internationally recognized organization that provides a neutral forum supporting the global financial information industry.

HKE_x will sponsor this year's FISD Women's Group luncheon in Hong Kong, with details as follows:

Date: 10 November 2015

Venue: HKE_x Auditorium

- | | |
|-------|--|
| 11:30 | Registration |
| 12:00 | Opening Remarks – Winnie Poon, Head of Market Data, HKE _x |
| 12:05 | Lunch |
| 12:30 | Keynote – Angelina Kwan, Head of Regulatory Compliance, HKE _x |
| 13:00 | Closing Remarks – Vicky Chan, HKE _x Women's Exchange Committee Member |
| 13:05 | Discussion/Networking |

Please visit <http://www.sjia.net/Events/FISD/eID/271> for more details

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OMD Free Trial Programme on Real-time Premium & FullTick Datafeeds and Historical Full Book



Objectives

- To experience faster and deeper depth market data from OMD via direct connection with HKEx for market transparency.
- To promote the subscription of OMD premium datafeeds and historical full book products

3-month free trial for real-time OMD-C & OMD-D datafeeds

- For new clients
- Include OMD-C and OMD-D Premium and FullTick datafeeds via direct connection

3-month free trial for historical Full Book

- For new clients
- Include securities and derivatives full book data

Program Details

– Real-time Data



Program Details:	
Program Duration	<ul style="list-style-type: none"> From 1 November 2015 to 31 October 2016, subject to annual review thereafter
Applicable Datafeeds	<ul style="list-style-type: none"> Securities data: Securities Premium and Securities FullTick Derivatives data: Derivatives Premium and Derivatives FullTick
Free Trial Period	<ul style="list-style-type: none"> 3 calendar months from the datafeed commencement date or start date of respective connection
End-User Licence Fee	<p style="text-align: center;"><u>Waived</u></p> <p>Applicants who submit the End-User Licence application forms before end October 2016</p>
Connection Fee	<p style="text-align: center;"><u>Waived</u></p> <ul style="list-style-type: none"> For eligible End-User Licence applicants, first set of standard connection will be waived For eligible client with dedicated connection via IVs, first set of standard connection will be waived
Subscriber Fee/ Individual User Fee	<p style="text-align: center;"><u>Waived</u></p> <ul style="list-style-type: none"> All internal display and non-display usage fees
One-off Connection Fee	<p style="text-align: center;"><u>Waived</u></p> <ul style="list-style-type: none"> One-off Connection Fee for respective premium datafeeds
HSN / HSTN Subscription	<ul style="list-style-type: none"> A 3-month contract (instead of standard 24 months) of HSN/HSTN subscription will be offered to clients under this program

Program Details

– Historical Data



Program Details	
Program duration	From 1 November 2015 to 31 October 2016, subject to annual review thereafter
Applicable Products	Securities data: <ul style="list-style-type: none">• Historical Full Book - Securities Market (Binary) Derivatives data: <ul style="list-style-type: none">• Historical Full Book - Derivatives Market (Non-SOM) (Binary and CSV format)• Historical Full Book - Derivatives Market (SOM) (Binary and CSV format)
Free Trial Period	Data of the latest 3 months
Subscription Fee	<u>Waived</u>

New Historical Data Products



To enhance our service offerings for historical data products, HKEx has introduced new historical data products as well as CSV files for some products that are previously available in binary format

Market	Product	Content	Format
Securities	Historical Full Book	<ul style="list-style-type: none"> Orders (inc. odd lot) Trades Reference Data Status 	Binary
	Historical Order and Statistics Update *(new product to replace Bid and Ask Record)	<ul style="list-style-type: none"> Orders (inc. odd lot) Static Data* Statistics 	CSV
	Trade File	<ul style="list-style-type: none"> Trades Trade Cancel 	Binary and CSV
	Trade Ticker File	<ul style="list-style-type: none"> Trade Tickers 	Binary and CSV
Derivatives	Historical Full Book	<ul style="list-style-type: none"> Orders and Trades Reference Data Status 	Binary and CSV
	Trade File	<ul style="list-style-type: none"> Trade (inc. block trades) Reference Data 	Binary and CSV
	Trade Statistics File	<ul style="list-style-type: none"> Trade Statistics Reference Data 	Binary and CSV

For full product suite, please refer to our Historical Data Product Page
<https://www.hkex.com.hk/eng/ods/English/asp/prdList.asp>

Annual Mainland Conference in Shanghai



Conference Details:

Date & Time	11 December 2015 (Friday) 8:30am – 4:00pm
Venue	Grand Hyatt Shanghai, Pudong
Topic	Overview of market data business initiatives and latest development in Mainland
Speakers	HKEx executives, IV delegates, executives from Mainland financial industry
Key Participants	Licensed information vendors, Mainland brokers, fund manager as well as other service providers in the financial sector, banks and other financial institutions Capacity: 200 participants
Booth	Free to IVs on a first come first serve basis

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Upcoming System Related Activities

Platform	Activity	Date	Date of Client Notice
HKEx Orion Market Data Platform – Derivatives Market (OMD-D)	Adjustment of Last Trading Time of London Metal Mini Futures	9 Nov 2015	19 Jun 2015
	Introduction of New London Metal Mini Futures Contracts	To be announced	13 Oct 2015
	Bandwidth Increase	Jan/Feb 2016	26 Sep 2015
HKEx Orion Market Data Platform – Securities Market (OMD-C)	New Information on Closing Auction Session (CAS) and Volatility Control Mechanism (VCM)	Q3 2016	5 Aug 2015
Mainland Market Data Hub (MMDH)	Emergency Drill on Site Failover	14 Nov 2015	20 Oct 2015
Issuer Information Feed System (IIS)	Market Rehearsal on Automatic Line Failure Detection and Reconnection	14 Nov 2015	19 Oct 2015

Upcoming System Related Activities

- Adjustment of Last Trading Time (LTT)

- Effective 9 November 2015



Business Change:

The trading hours of the following **London Metal Mini Futures Contracts** on the Last Trading Day will be extended as below to enable investors to react to the underlying assets' price movements between 4:15 pm Hong Kong time and time at which the Official Settlement Price is published

Trading Hours on Last Trading Day (Hong Kong Time)				
London Metal Mini Futures Contracts	Day Session	After Hour Session		
		Current	After Adjustment of LTT	
London Aluminium Mini Futures	9:00 am - 4:15 pm (Remain unchanged)	No After-hour Session	During British Summer Time	5:00 pm - 8:00 pm
London Copper Mini Futures			Outside British Summer Time	5:00 pm - 9:00 pm
London Zinc Mini Futures			During British Summer Time	5:00 pm - 7:35 pm
			Outside British Summer Time	5:00 pm - 8:35 pm
			During British Summer Time	5:00 pm - 7:55 pm
			Outside British Summer Time	5:00 pm - 8:55 pm

System Change:

For **London Metal Mini Futures Contracts only**, 2 new market states will be introduced to replace the existing market states for the closes of the regular and the after-hour sessions separately. The market states for contracts other than the London Metal Mini Contracts will remain unchanged.

Session State	Current		After Adjustment of LTT	
	Session Symbol	Status Code	Session Symbol	Status Code
Close of Regular Session	CLOSE_TODAY	18	CLOSE_TODAY_E	21
Close of After-Hour Session	AHT_COSE	10	AHT_CLOSE_E	22

Upcoming System Related Activities

- Introduction of New London Metal Mini Futures Contracts



Business Change:

Hong Kong Exchanges and Clearing Limited (HKEx) plans to introduce its second group of London Metal Mini Futures contracts – London Nickel Mini Futures, London Tin Mini Futures and London Lead MiniFutures, pending regulatory approval and market readiness.

London Metal Mini Futures Contracts (Second Group)	Trading Symbol	Commodity Code
London Nickel Mini Futures	LRN	5104
London Tin Mini Futures	LRS	5106
London Lead Mini Futures	LRP	5105

Information Vendors are reminded to return the Vendor Access Code Form to provide us the access codes for obtaining the market data of the above new London Metal Mini Futures Contracts via your terminal services.

Upcoming System Related Activities

- OMD-D Bandwidth Increase

- Effective Jan/Feb 2016



Requirement Change:

The bandwidth requirements of OMD-D datafeed products will be increased as below in **January/February 2016**.

OMD-D Datafeed Products	Current Bandwidth (Mbps)			Required Bandwidth (Mbps) – Jan/Feb 2016		
	Non SOM	SOM	Total	Non SOM	SOM	Total
Derivatives Standard (DS)	5	10	15	14	14	28 *
Derivatives Premium (DP)	9	16	25	26	34	60
Derivatives FullTick (DF)	7	12	19	25	35	60
Derivatives Trade (DT)	N/A	N/A	2	N/A	N/A	2 *

* High Performance Option (HPO) is not required for the bandwidth of 30 MBps for DS plus DT

For clients' budgeting purposes, the possible further increases in the bandwidth requirements after the upgraded in January/February 2016 are indicated below for reference only. In order to avoid unnecessary line cost being borne by clients, the bandwidth increases, if any, will be implemented progressively in phases if deemed to be more appropriate. Should there be any plan to further increase the OMD-D line bandwidth after January/February 2016, three months advance notice with confirmed bandwidth requirements will be given each time.

OMD-D Datafeed Products	Possible Bandwidth (Mbps) by end 2016		
	Non SOM	SOM	Total
Derivatives Standard (DS)	37	31	68
Derivatives Premium (DP)	50	50	100
Derivatives FullTick (DF)	50	50	100
Derivatives Trade (DT)	N/A	N/A	2

Upcoming System Related Activities

- *OMD-D Bandwidth Increase*

- *Effective Jan/Feb 2016*



Clients are advised to ensure that your overall systems, including, but not limited to, bandwidths of production circuits, network equipment, downstream network, application systems, etc., are ready for the increased data volume **before the Market Rehearsal in Jan/Feb 2016.**

Direct Connection Clients	Indirect Connection Clients
<ul style="list-style-type: none">• Liaise with network carrier for the upgrade of your line bandwidth and network equipment, e.g. router, as necessary• Upgrade your overall system, including applications and downstream networks, as necessary, for the increased data volume• Use the Simulator Tool to test-run your feed-handler and other applications to ensure that they can handle the increased data volume• Feed providing vendors should make proper arrangement with your feed receiving clients to make sure that they have sufficient capacity to handle the data volume after the bandwidth increase	<ul style="list-style-type: none">• Upgrade your overall system as necessary for the increased data volume• Liaise with your feed providing vendors on the arrangements, e.g. testing arrangement, as necessary for your system to handle the data volume after the bandwidth increase

Upcoming System Related Activities

- Closing Auction Session (CAS) & Volatility Control Mechanism (VCM)
- Effective Q3 2016



The following information will be provided by OMD-C after the implementation of CAS and VCM in the Securities Market:

OMD Message	Existing or New?	Change and Usage	VCM	CAS	OMD Channel
Securities Definition (11)	Existing	New data field "VCM Indicator" will be added to indicate that VCM is applicable to the security	✓		ALL : 1
		New data field "CASIndicator" will be added to indicate that CAS is applicable to the security		✓	
VCM Trigger (23)	New	New message to provide the start time, end time, reference price, and upper/lower price limits of the cooling off period once it is triggered by the VCM	✓		SS: 10 SP: 20 – 28 SF: 30 – 38
Trading Session Status (20)	Existing	New values of the existing data fields "TradingSessionSubID" and "TradingSesStatus" to differentiate the various stages in CAS		✓	ALL : 2
Reference Price (43)	New	New message to provide the reference price (same as the closing price of the continuous trading session), and the updates on the upper/lower price limits during different stages in CAS		✓	SS: 10 SP: 20 – 28 SF: 30 – 38
Order Imbalance (56)	New	New message to provide the order imbalance information at the Indicative Equilibrium Price (IEP) during CAS		✓	
Indicative Equilibrium Price (41)	Existing	This message will also be applicable to CAS, in addition to the Pre-opening Session		✓	

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Highlight on Compliance Issues

1

Misunderstanding in reporting Non-display Usages

2

Eight Common non-compliance incidents on Basic Market Price (BMP) service

3

Omission in reporting Derived Data

4

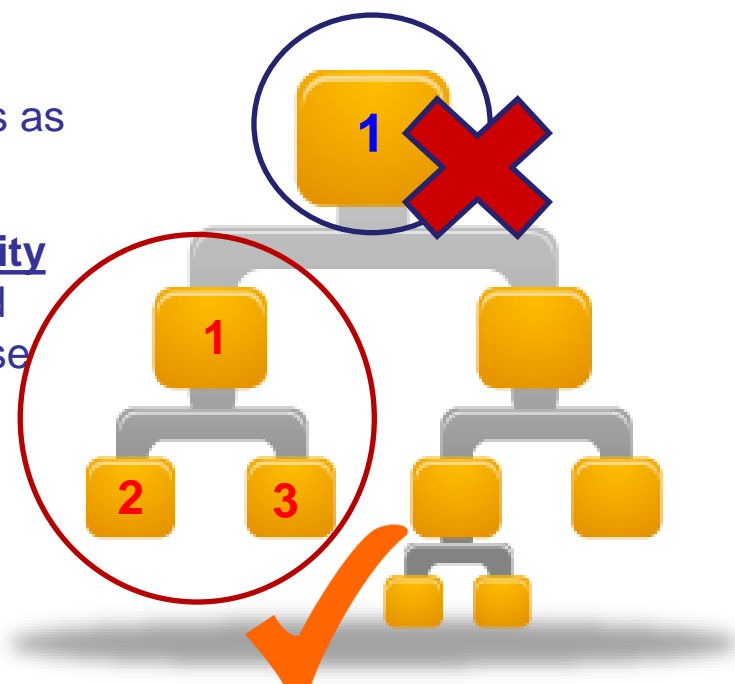
Under-reporting of Snapshot Usages in Portfolio

Highlight on Compliance Issues

- Non-display Usages

(A) Misunderstanding in reporting Non-display Usages

- Non-display Usages are charged at per firm level
- “Per Firm” means:-
 - **NOT** the licensee itself or its group companies as a whole; and
 - It should be each and every single legal entity that engages in non-display usage (i.e. should report **three** (but not one) assuming only those three subsidiaries involve in non-display data usages)



Highlight on Compliance Issues

- Basic Market Price (BMP) service

(B) Eight Common non-compliance incidents on BMP service

Violations to:-

1. Display BMP data on streaming basis;
2. Display more than 20 stocks on top twenty lists with BMP data;
3. Display more than 20 stocks on portfolio valuation with BMP data;
4. Display more than 20 stocks on most recently visited list with BMP data;
5. Display more than 5 charting comparison;
6. Advisory messages were omitted;
7. Indemnifying disclaimer was not available; and
8. Failure to prevent direct access to specific BMP result page via bookmarks or other hyperlinks outside the IV's website



Highlight on Compliance Issues

- Omission to report fee-liable Derived Data

(C) Chargeability on Derived data

- Any data which can be **easily re-engineered to real-time market price** is **fee-liable**
- e.g. via display of **Market Value** and **Quantity** for each individual stock under portfolio

戶口概況											
當日委託 當日成交 更改撤銷委託 歷史委託 歷史成交 股票往來 現金往來											
貨幣: 港幣		總股數	可動用股數	承上股數	T1 股數	T2 股數	貨幣		市值	平均價格	溢虧金額
購買力 (港幣)	1,359,928.15	1,200	1,200	1,200	0	0	HKD		85,320.00	67.99890	3,361.32
資產總值 (港幣)	806,763.31										
凍結現金 (港幣)	280,447.16	5,000	5,000	10,000	-5,000	0	HKD		194,250.00	38.90000	-500.00
現金結餘 (港幣)	253,751.24										
信貸總額 (港幣)	0.00	650,000	650,000	650,000	0	0	HKD		81,250.00	0.12869	-4,345.90
可取金額 (港幣)	-26,695.92										
可抵押股票價值 (港幣)	194,432.00										
今日買賣差額 (港幣)	0.00										
參考股票總市值 (港幣)	360,820.00										
明日待交收金額 (港幣)	192,192.07										

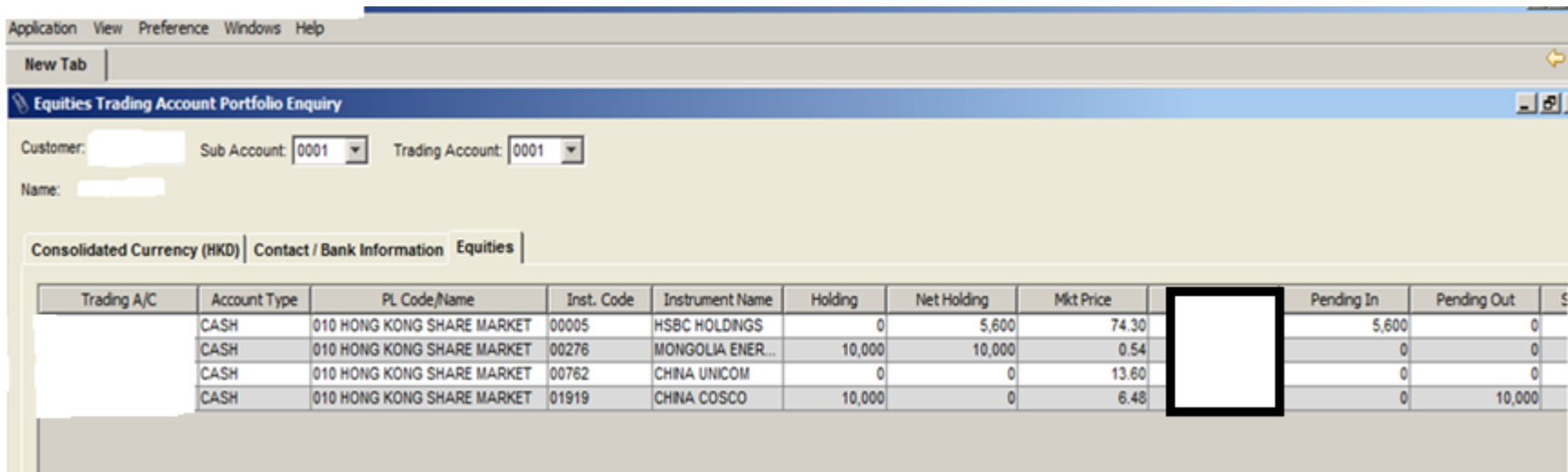


Highlight on Compliance Issues

- Under-reporting of Snapshot Usages

(D) Counting of snapshot usages in portfolio

- Count for each real-time snapshot update and for each and every stock refresh in a basket portfolio
- E.g. Four fee-liable quotes for each refresh of the total 4 stocks in portfolio in the screenshot below



Application View Preference Windows Help

New Tab

Equities Trading Account Portfolio Enquiry

Customer: [Redacted] Sub Account: [0001] Trading Account: [0001]

Name: [Redacted]

Consolidated Currency (HKD) | Contact / Bank Information | Equities

Trading A/C	Account Type	PL Code/Name	Inst. Code	Instrument Name	Holding	Net Holding	Mkt Price		Pending In	Pending Out	S
[Redacted]	CASH	010 HONG KONG SHARE MARKET	00005	HSBC HOLDINGS	0	5,600	74.30		5,600	0	
[Redacted]	CASH	010 HONG KONG SHARE MARKET	00276	MONGOLIA ENER...	10,000	10,000	0.54		0	0	
[Redacted]	CASH	010 HONG KONG SHARE MARKET	00762	CHINA UNICOM	0	0	13.60		0	0	
[Redacted]	CASH	010 HONG KONG SHARE MARKET	01919	CHINA COSCO	10,000	0	6.48		0	10,000	

Q&A

Website: www.hkex.com.hk/MarketData

Email: MarketData@hkex.com.hk

Thank you!